

LISTING OF THE CLAIMS

The listing, if entered, replaces all prior versions of the claims in the application.

1-12 (Canceled)

13-27 (Canceled)

28. (Currently Amended) A system comprising:

a first circuit board comprising a first electrical contact and a first optical connector;
a second circuit board comprising a second electrical contact and a second optical connector configured to be mated to the first optical connector, wherein when mated to each other, the first optical connector and the second optical connector provide a first optical connection for transmitting at least one optical signal between the first circuit board and the second circuit board; and a pin header having at least one pin, the at least one pin passing through at least one hole in the first circuit board and at least one hole in the second circuit board, one of the at least one pins configured to make electrical contact with the first electrical contact and the second electrical contact, wherein the at least one pin is perpendicular to the first optical connection between the first optical connector and the second optical connector.

29. (Currently Amended) The system of claim 28, wherein

the second optical connector is configured to be displaced along a first axis until the second optical connector is mated with the first optical connector; the first axis is perpendicular to a second axis; and the at least one pin extends along the second axis.

30. (Previously Presented) The system of claim 28, wherein

when extended through the at least one hole in the first circuit board and the at least one hole in the second circuit board, the at least one pin provides a second connection for transmitting at least one signal between the first circuit board and the second circuit board.

31. (Canceled)

32. (Currently Amended) The system of claim 31, wherein
the first optical connection transmits at least one optical signal between the first circuit
board and the second circuit board, and
the first connection transmits the at least one optical signal along a first axis.

33. (Previously Presented) The system of claim 32, wherein
the second connection transmits at least one electrical signal between the first circuit
board and the second circuit board, and
the second connection transmits the at least one electrical signal along the second axis.

34. (Currently Amended) The system of claim 31, wherein
the optical connection between the first optical connector and the second optical
connector fixes the first circuit board and the second circuit board in at least a first
plane.

35. (Previously Presented) The system of claim 34, wherein
the second circuit board is an OC-192 transmit module.

36. (Previously Presented) The system of claim 31, wherein
the second circuit board is disposed with zero interconnection height relative to the first
circuit board.

37. (Previously Presented) The system of claim 28, further comprising:
a pass-through socket, wherein
the at least one pin passes through at least one hole in the pass-through socket.

38. (Previously Presented) The system of claim 37, further comprising:
a second pass-through socket, wherein
the at least one pin passes through at least one hole in the second pass-through socket.

39. (Previously Presented) The system of claim 38, wherein
the pass-through socket is disposed on one side of a combination of the first circuit board
and the second circuit board, and
the second-pass through socket is disposed on an opposite side of the combination of the
first circuit board and the second circuit board.

40. (Previously Presented) The system of claim 28, wherein
electrical contact with the at least one pin is maintained by spring force of the first
electrical contact and the second electrical contact.

41-45 (Canceled)

46. (Previously Presented) The system of claim 40, further comprising:
a pass-through socket, wherein
the at least one pin passes through at least one through-hole in the pass-through socket.

47. (Previously Presented) The system of claim 46, further comprising:
a second pass-through socket, wherein
the at least one pin passes through at least one hole in the second pass-through socket.

48. (Previously Presented) The system of claim 47, wherein
the pass-through socket is disposed on one side of a combination of the first circuit board
and the second circuit board, and
the second-pass through socket is disposed on an opposite side of the combination of the
first circuit board and the second circuit board.

49 – 62 (Canceled)